

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/010982

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02M7/5387 H02P6/08 H02P6/10 H02P6/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M H02P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 832 576 A (DEGUCHI YUTAKA ET AL) 23 May 1989 (1989-05-23) column 3, lines 21-44; figure 2 column 7, lines 49-56; figure 6 column 6, lines 38-46; figures 4,9 column 6, lines 47-50 column 12, lines 7-12; figure 10 column 8, lines 35-57; figures 3,5	1
X	column 5, lines 35-54; figures 6,7 column 12, lines 7-12	2
X	column 8, lines 1-57; figures 5-7	3,4,6-8
X	column 7, lines 40-43; figure 2	5
X	column 6, lines 23-46; figure 10	9-16
X	column 8, lines 1-57 figure 1	17

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

27 October 2004

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04/11/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 194 856 B1 (NINOMIYA HISAKAZU ET AL) 27 February 2001 (2001-02-27) column 3, lines 1-33; figures 5,7,8,16 column 22, lines 8-57 -----	1-17
X	US 2001/035018 A1 (NAKAMURA HIDEYUKI ET AL) 1 November 2001 (2001-11-01) paragraphs '0005!, '0009!, '0014!, '0036!, '0037!, '0048!; figure 1 -----	1,2
A	EP 0 868 017 A (SEAGATE TECHNOLOGY) 30 September 1998 (1998-09-30) page 9, lines 8-28; figures 1-4,6 -----	3,4,6-8
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 06, 22 September 2000 (2000-09-22) & JP 2000 069784 A (CALSONIC CORP), 3 March 2000 (2000-03-03) abstract; figure 1 -----	5

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Information on patent family members

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